

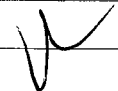
Work Order ID 132670

Thursday, May 07, 2015 3:09:34 PM

132670

Page 1

Item ID: D4149-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Crosstube Lug Plate, Aft
Start Date: 5/7/2015 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 5/7/2015 Req'd Qty: 12.00 ***12*** Customer:
Reference:

Approvals: Process Plan:  Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4149	C								
100		0.00							
100									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	Cut as per dwg D4149								
	Prog Rev: <u>C</u>								
	Dwg Rev: <u>C</u>								
	OPEN TO HOLES TO FINISH SIZE AS PER DWG								
	Deburr as required								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.00							
Quality Control									

12 0 Jm15-5-11

12 0 Jm15-5-11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																													
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Work Order ID 132670

Thursday, May 07, 2015 3:09:34 PM

132670

Page 2

Item ID: D4149-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Lug Plate, Aft
 Start Date: 5/7/2015 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 5/7/2015 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00							
120						(12)			
QC	Memo	0.00							
Quality Control									
150	Identify as per dwg & Stock Location. <u>st 094</u>	0.00							
150						12			
Packaging	Memo	0.00							
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

MLJ

MAY 21 2015

MLJ

MAY 20 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

Thursday, May 07, 2015 3:09:37 PM

Page 1

Work Order ID: 132670

132670

Parent Item: D4149-1

D4149-1

Parent Item Name: Crosstube Lug Plate, Aft

Start Date: 5/7/2015

Required Date: 5/7/2015

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC
IPP Rev:B 11.03.03 as per revC DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S11GA		Purchased				100	sf	194.4917	0.1355	1711579			
M304S11GA									**	(2)		Jm 15-5-11	
304/316 0.125 Sheet													

Location

Loc Qty

Loc Code

MAT020

194.4917

122521

40.2

M128254

56

M129545

36.875

M129972

61.4167

129972

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
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OTHER : ☐					

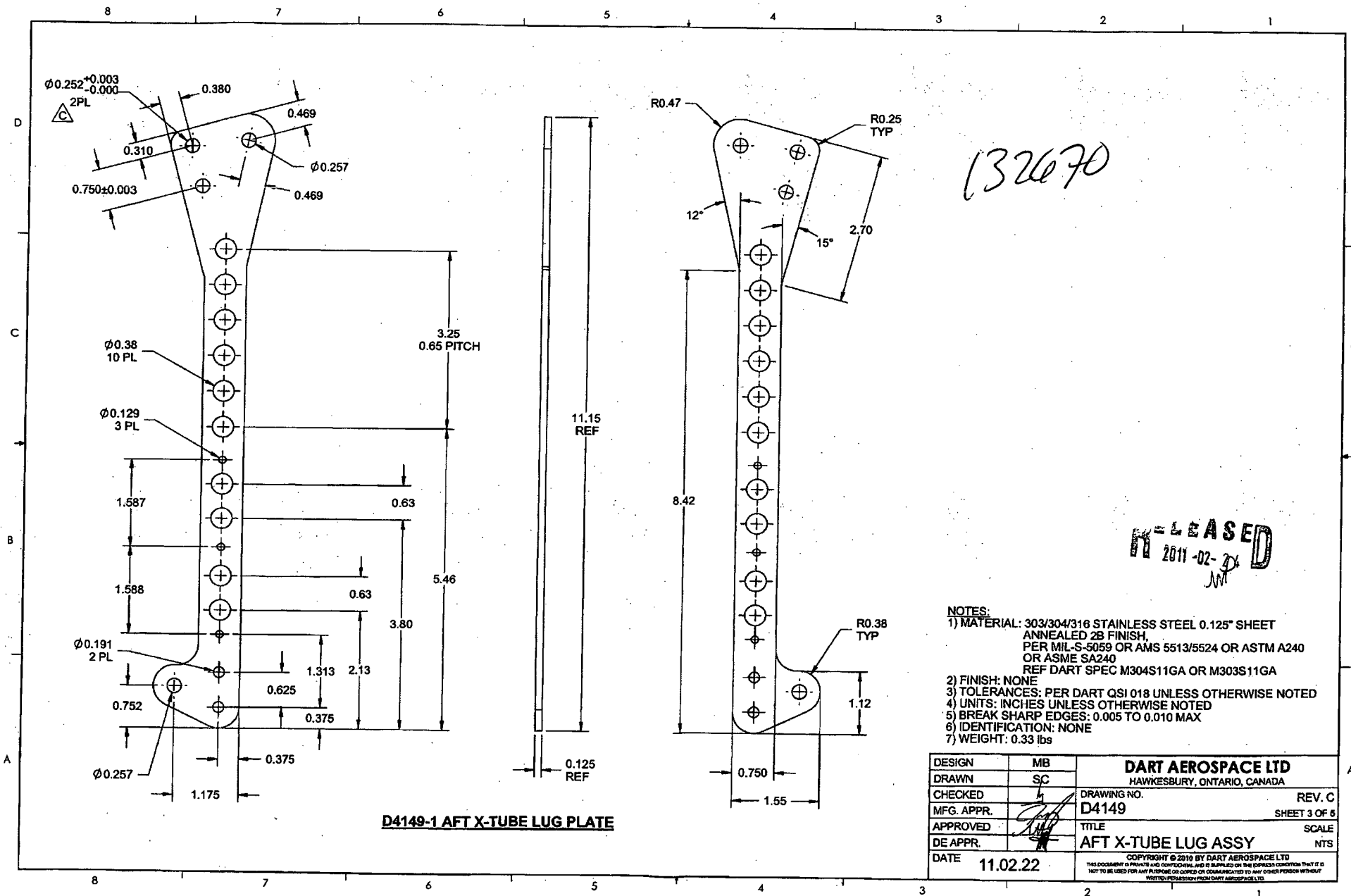
DART AEROSPACE LTD		Work Order: 132670
Description: Aft Crosstube Lug Plate		Part Number: D4149-1
Inspection Dwg: D4149	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	0.130"	-			
Ø0.191	+0.005/-0.001	0.195"	-			
Ø0.257	+0.006/-0.001	0.258"	-			
Ø0.38	+0.006/-0.001	0.38"	-			
0.380	+/-0.010	0.380"	-			
0.469	+/-0.010	0.469"	-			
0.310	+/-0.010	0.310"	-			
0.750	+/-0.010	0.752"	-			
3.25	+/-0.030	3.25"	-			
0.65	+/-0.030	0.65"	-			
0.63	+/-0.030	0.63"	-			
5.46	+/-0.030	5.46"	-			
3.80	+/-0.030	3.80"	-			
2.13	+/-0.030	2.13"	-			
1.313	+/-0.010	1.313"	-			
0.625	+/-0.010	0.625"	-			
0.375	+/-0.010	0.375"	-			
1.175	+/-0.010	1.175"	-			
0.752	+/-0.010	0.752"	-			
1.588	+/-0.010	1.588"	-			
1.587	+/-0.010	1.587"	-			
11.15	+/-0.030	11.15"	-			
0.750	+/-0.010	0.750"	-			
1.55	+/-0.030	1.55"	-			
1.12	+/-0.030	1.12"	-			
8.42	+/-0.030	8.42"	-			
2.70	+/-0.030	2.70"	-			
0.125	+/-0.010	0.118"	-			
Ø0.252	+0.003/-0.000	0.253"	-			

Measured by: Jm	Audited by: DAS	Preliminary Approval:
Date: 15-5-11	Date: 9-89 MAY 19 2015	Date:

Rev	Date	Change	Revised by	Approved
A	10.08.04	New Issue	KJ	
B	12.02.01	Dimensions updated per Dwg Rev C	KJ	



D4149-1 AFT X-TUBE LUG PLATE

- NOTES:**
- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET
ANNEALED 2B FINISH,
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240
OR ASME SA240
REF DART SPEC M304S11GA OR M303S11GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.33 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
DATE	11.02.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	